Engineering Telecom Regulation

Pillsbury Winthrop Shaw Pittman LLP

U.S. Telecom Regulation… in the 21st Century

Presentation to Center for Telecommunications Management

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The Situation

- Broadband deployment is an important measure of national accomplishment and economic strength
- The U.S. presently ranks 15th among countries evaluated by the OECD at 19.6 subscribes for every 100 inhabitants
  - *and this is using 200 kbps as the "standard"*
- Korea ranks 5th
  - Factors explaining Korea: geographic and population density
  - Government sponsorship of fiber initiatives
  - Limitation of competitive alternatives

The Challenge

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The United States must act to improve broadband availability

- importance to GNP productivity, innovation, ability to compete internationally, balance of trade, etc.

Market forces alone will not be sufficient

- incumbents and new entrants will pick markets most attractive of new services
- important sectors of the economy and regions (rural) will be left behind (the “digital divide”)

The rate of broadband deployment will depend on Government policies and regulation

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The Problem

The US regulatory regime is an anachronism that retards exploitation of technologies and provision of services

- The *categorical* regime of the Communications Act cannot be reconciled with technology *convergence*
- Current US telecom law impairs if not precludes the FCC from setting an effective national telecom policy
- Lobbying, partisanship and regulatory "gaming" (e.g., arbitrage) dominate the process and define outcomes

To remain competitive globally, the US needs a clear national strategy, executive leadership and statutory change.

The Communications Act must be replaced

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Why Change?

- The present regulatory regime answers problems that are no longer relevant and does not solve current ones
- *Convergence* first obscured and now renders obsolete the "categorical" regime of telecom regulation that has been in place since 1934
- Old boundaries that separated services and service providers have crumbled as IP-enabled services replace legacy methods of delivery
- The Communications Act is anchored in premises, about technology, services, markets and providers that have been overtaken by events
- “Command and control” regulation has become a barrier to broadband deployment and innovation

The "Old" Regulatory Structure

Since 1934, "communications services" are regulated as "common carriers" (like railroads)

- theory: monopolistic carriers control access to essential public facilities and must be regulated closely
- specialized agencies at the federal level (FCC) and at states ("public utility commissions") regulate as utilities
- originally, common carriers were controlled as to "rate of return" or with "rate caps"
- services ordinarily were subject to tariff and not negotiated with customers
- carriers required to operate "in the public interest" and to make services available to all and without discrimination

US laws assumed that communications markets were "natural monopolies" and competition was very limited

Emergence of Competition

Beginning in the late 1960's, competition emerged for new or distinct markets

- Long Distance Markets: MCI vs AT&T "Long Lines"
- Competitive Access Services (connecting business customers to the PSTN)
- Initial Local Exchange competition

Doubts emerged about the "natural monopoly" premise

In 1984, a judicial "consent decree" broke up AT&T

- 7 independent local exchange companies (the "Baby Bell's")
- Local exchange companies barred from long distance
- Separate business entities for equipment and long distance
- "Line of Business" restrictions
- *Equal Access Obligations*

The 1996 Reform Act

- Sought to facilitate competition at the local exchange level
  - Sections 251 and 252 mandate interconnection between rival carriers and give new entrants rights to lease network elements and to acquire and resell incumbent services at a wholesale basis
- Largely missed the Internet and gives no practical guidance for "IP-enabled services"
- Did not achieve the objective of promoting facilities-based local competition
- Did establish federal policy to preempt state or local laws that restrict or prohibit communications services -- and thus did enable "inter-modal" or "cross-platform" competition

Regulatory Baseline - 1996

	Telco	Data/ Enhanced Service	Cable	Wireless
Services Provided	Voice	Data	Video	Voice
Must Afford Network Access to Competitors	Yes	No	No	No
Must Sell From Tariff	Yes	No	No	No
Franchise Required?	Yes (PUC)	No	Yes (munic.)	No
Subject to USF?	Yes	No	No	On long distance
Must Pay Access Charges, Recip. Comp.	Yes	No	No	Yes

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The "Classical" Regulatory Structure

	Voice	Data	Wireless	Video
Technology	PSTN Switched Analog Copper Wire	Dial-up modem T1 Service Frame, ATM, Sonet Nets	CDMA TDMA GSM Voice only	RF Antenna DTH Antenna CATV, Coax
Providers	Common Carriers (ILECS, CLECS, IXCs)	Interexchange Carriers (IXCs), CAPs	CMRS carriers (initially, many)	Broadcasters Satellite CATV
Regulation	"Telecom. Service" FTA Title II + State PUC *heavily regulated*	"Information Service" FTA Title I *Lightly regulated*	FTA Title III *Barely regulated*	Local Franchise + FTA Title VI "Modestly" regulated

Convergence—Phase 1
Categorical distinctions blurred

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1996 Telecom Act - Baseline

- Intra-modal competition: between companies using same or similar facilities. Regulatory parity "vertically"

First Phase Convergence: 1996 – (2005)

- Inter-modal competition: between companies using different facilities and different technologies
- Characterized by carrying same applications or content over different medium
- Asymmetries in law/regulation depending on provider, not application, content or customer

Dysfunctional consequences: political impasse, opportunism, gaming, arbitrage

Everything has changed – except the regulatory structure

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	Voice	Data & Internet	Wireless	Video
Technology	PSTN, Switched Analog, Copper Packet Switched Fiber/HFC IP-enabled	Dial-up Cable Modem, xDSL T1, FTTP, FTTN VPN, Enterprise Net IP networks	CDMA, TDMA GSM 2.5 & 3G WiFi (802.11x) Meshed Net	Rf, DTH Antenna CATV, Coax HFC IP-video Cellular video
Providers	ILECS, CLECS Cable, Wireless [Un]regulated IP	ILECs, IXCs ESPs Enterprises Cable Wireless	Consolidation (largest owned by AT&T & Verizon)	Rf Broadcasters Satellite MSO (cable) Telcos (AT&T, V) Cellular Provdrs
Regulation	"Telecom. Service" FTA Title II + State PUC *regulated*	"Information Service" FTA Title I *Lightly regulated*	FTA Title III *Barely regulated*	Local Franchise + FTA Title VI "Modestly" regulated

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Convergence – to date

- Content Delivery becoming indifferent to facility or medium
- Disruptive (or Innovative) forces may drive legacy firms to serve market niches
- Unresolved questions of protecting digital rights
- Significant risk of "left behind" segments
  - Rural areas
  - Low income demographics
  - Small business
- Potential for abusive market practices
- Some risk of political/regulatory backlash
- "Best" national interests" not necessarily well-served …

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Lessons of Convergence: So Far

- The structure and "rule-based" system of the Communications Act has become an obstacle to innovation and broadband deployment
- Some providers suffer an enormous regulatory cost premium that is difficult to reconcile with consumer value or bona fide public needs
- The regulatory burden is asymmetric without rational basis for the distinction
- The current law and regulation encourage gaming, arbitrage and litigation without likely correlation to the public benefit.
- Change is needed -- as a matter of national policy.
  - It is in the national interest to rationally regulate communications services and to set a communications policy to serve national needs
  - Communications policy should secure identified objectives – rather than accommodate the political power of dominant market actors
  - The nation benefits by encouraging technological innovation, fair competition and rapid broadband deployment

Next phase convergence:
Cross-categorical providers, services

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	Voice Data Cellular Satellite Video			
Technology	Accelerating transition from wireline/cable to wireless IP networks will displace/replace PSTN 4G Wireless & WiMax (+) enables broadband wireless "Open Source" spectrum invites new entrants (11MHz)			
Providers	PTP-source content challenges client-server delivery Web-enabled provisioning, service sets – vs OSS/BSS "IP-LECs" seek consumer video; Cable seeks enterprise Challenge to business model of most legacy firms			
Regulation	**"Telecom. Service" FTA Title II + State PUC *regulated***	**"Information Service" FTA Title I** *Lightly regulated*	**FTA Title III** *Barely regulated*	**Local Franchise + FTA Title VI** **"Modestly" regulated**

Implications of Convergence

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"Bright Side"

- More consumer choices
- More business choices
- New media opportunities
- Powerful markets for equipment and device makers
- Universal access to content
- Innovation supreme
- Competition everywhere, and for everything

"Dark Side"

- Market chaos
- Consumer confusion
- Capital loss & scarcity
- Non-universal service
- Universal access to content Abuse of Content Owners\DRM
- Predatory conduct
- Deployment discrimination
- Potential service and provider disruption
- Risks to essential public needs and policies

What does the U.S. do?

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Executive branch leadership is needed

- Communications policy is primarily a federal problem -- though there are interests of the states, and local governments, to recognize

Congress plays an important role but should not lead or define

- Compromise and concession, as inevitable in the legislative process, produces ambiguous, perverse or dysfunctional results.

The FCC should implement a national communications policy but should not be the instrument to articulate it

- As custodian over legacy systems, the FCC lacks the motivation or ability to reform itself
- The FCC's role is to oversee and administer a policy set by the Executive and implemented by Legislative acts

The FTC will play a more important role as we depart historical, "command and control" regulation

When will this happen?

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Not now.

- The present Administration lacks the interest, authority and (arguably) capability leadership is needed
- Absence of consensus makes any significant telecom initiative unlikely in this Congress
- The FCC also cannot be expected to fashion important initiatives that survive either Congress or the Courts

An Issue for the 2008 Elections

- Communications reform should be a priority of the next President (irrespective of party)
- For ordinary citizens as well as businesses of all sizes, "telecommunications policy" has vital implications for the economy, commerce, health and safety, international affairs, etc.
- It is now timely to study the policy alternatives, and means of implementation, to inform the debate and facilitate “smart choices”

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What might be done?

How might we envision a "re-engineered" scheme of law and regulation?

- First, we identify issues of national policy affected by telecommunications
- Then, we classify them by functionality and rank by priority or necessity
- Then consider such "externalities" as shareholder investment, existing facilities, consumer preference, tax and other receipts

As we define goals and objectives for reform, consider "trades," process and implementation

A fundamental question: what regulatory strategy?

- Retain the "ex ante" rule-based system?
- De-construct the FCC?
- Rely on "market forces"?
- Emphasize "ex post" enforcement, e.g., competition restraints and consumer protection measures

Engineering the future:
National Policy Considerations

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- Broadband deployment
- Public Safety
- Law Enforcement
- Universal Service
- Internet Access (“Net Neutrality”
- Consumer Protection
- Competition
- Technology Policy
- Innovation
- Spectrum Management
- “Federalism”
- Workforce Considerations
- Governmental revenues

Engineering the future:
Market & Service Considerations

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Market

- Business vs. Consumer Needs
- Facilities Investment
- Return on Investment
- Infrastructure Maintenance
- Consumer Preference
- Shareholder Value
- Access to Capital

Service

- QoS & Network Management
- Inter-carrier access to facilities
- “Net Neutrality”
- Responsiveness to Consumer Devices
- Provider Viability

Engineering the future: Legal Considerations

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Federal role (vs state, local)

Existing Laws At Issue
- Federal
- State
- Local

Competition Law

International Considerations: Standards, Coordination

FCC Role and Process

Congressional Oversight

FTC Authority

Content Considerations

Creators
- New Methods

Aggregators & Distributors

Content Owners
- Legacy
- New Media

First Amendment Issues

Ownership Issues

Spectrum Allocation

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Recommendations

Define a national strategy for telecommunications

as an Executive function, weigh the forces, factors and constraints make choices as necessary to articulate a national policy w/ priorities

Key choices

- oversight vs. control: "rule-based" system or …?
- distinguish between "national interests" and "goals"
- define "roles" and missions among federal, state & local actors

A policy-driven system should replace the current categorical regime

- proactive engagement to protect national interests
- oversight to promote goals – regulate by/as exception; increase FTC role

Replace the Communications Act

- improve data collection consistent with national interests & goals
- reduce regulatory burden and eliminate regulatory barriers
- assure compliance and retain enforcement

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